

TRI

LOG

TABLE
OF
TRIGONOMETRICAL SOLUTIONS
OF
RIGHT ANGLE PLANE TRIANGLES,
COMPUTED ON THE
LOGARITHMIC NUMBER 2,000000.

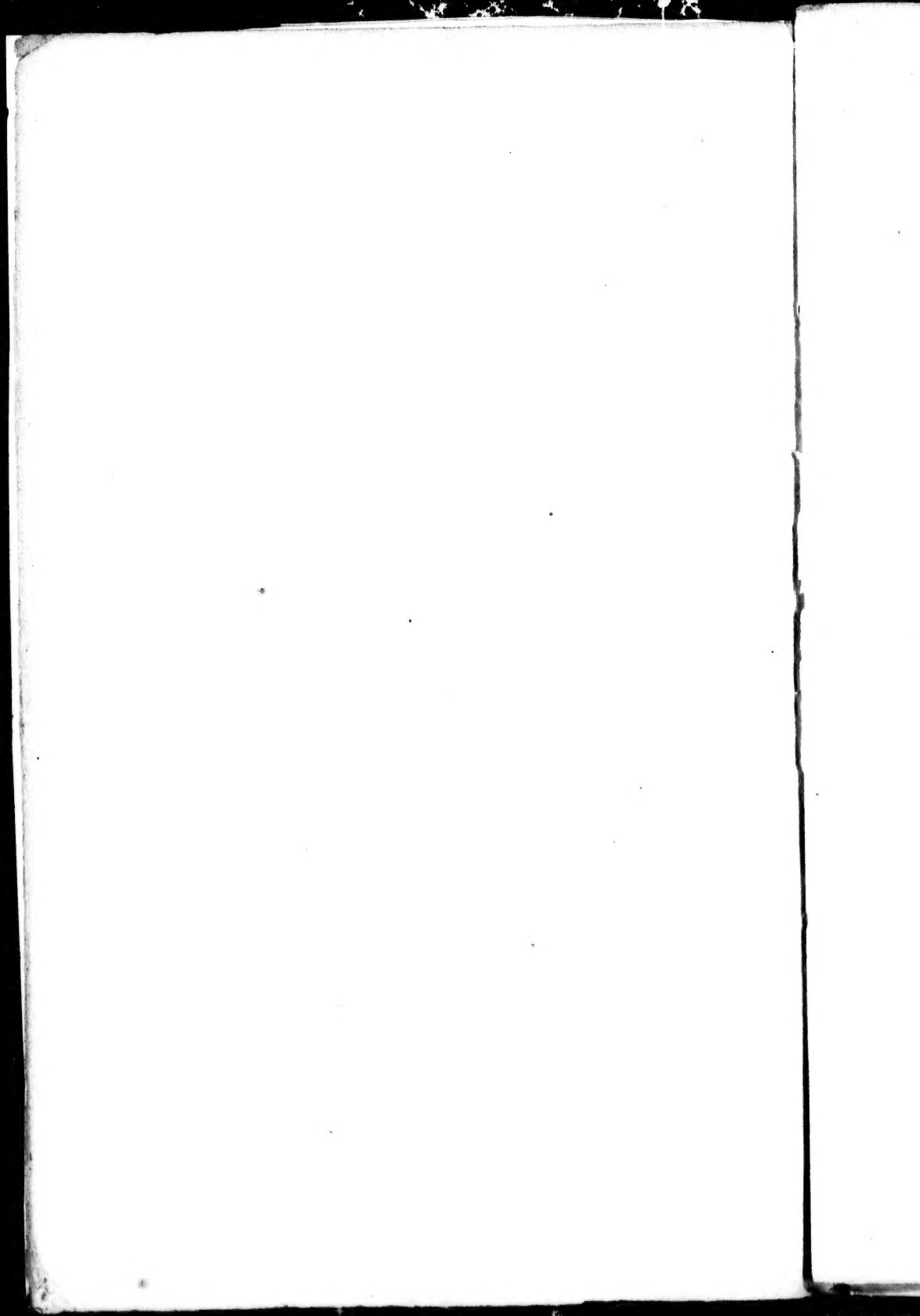
By JOSEPH BOUCHETTE, Junior,

LAND SURVEYOR.

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MONTREAL:
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1847.



To

Joseph Bouchette, Esquire,

Surveyor General

OF THE

Province of Lower Canada,

&c. &c. &c.

THIS TABLE

Is Most Respectfully Inscribed

BY

The Author.

EXPLANATION.

THE necessity of a Table that would remove, or substitute, the calculation by Logarithms, to find inaccessible distances, which so very frequently occur in the practice of Land Surveying in this country, and be moreover less liable to error, suggested to me the following computation of a Trigonometrical Table, to embrace those objects.

By admeasuring a base of a right angle triangle of 100 links or feet, and referring the angle which it measures with the hypotenuse, to the corresponding angle in the column of degrees and minutes, the number of chains, links or feet and fractional parts, in the next column, will be the extent or perpendicular required.

Should the base admeasure 200, 300, &c. links or feet, multiply the chains, links or feet, thus obtained, by 2, 3, &c. and the product will be the perpendicular required.

TO FIND THE HYPOTHENUSE.

The square root of the sum of the squares of the base, and the perpendicular as given by the Table, will be the extent or hypotenuse required.

Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
45°. 00'		1,00	0	48°. 00'		1,11	0	51°. 00'		1,23	4
	5		2		5		3		5		8
	10		4		10		6		10	1,24	2
	15		6		15	1,12	0		15		6
	20		8		20		3		20	1,25	0
	25	1,01	0		25		6		25		4
	30		3		30	1,13	0		30		8
	35		5		35		3		35	1,26	2
	40		8		40		6		40		6
	45	1,02	0		45	1,14	0		45	1,27	0
	50		3		50		3		50		4
	55		6		55		6		55		7
46 00		1,03	0	49 00		1,15	0	52 00		1,28	1
	5		3		5		3		5		4
	10		6		10		6		10		8
	15	1,04	0		15	1,16	0		15	1,29	2
	20		3		20		3		20		6
	25		6		25		6		25	1,30	0
	30	1,05	0		30	1,17	0		30		4
	35		3		35		3		35		8
	40		6		40		7		40	1,31	2
	45	1,06	0		45	1,18	1		45		6
	50		3		50		3		50	1,32	0
	55		6		55		7		55		4
47 00		1,07	0	50 00		1,19	1	53 00			8
	5		3		5		4		5	1,33	2
	10		6		10		7		10		6
	15	1,08	0		15	1,20	1		15	1,34	0
	20		3		20		4		20		4
	25		6		25		8		25		8
	30	1,09	0		30	1,21	2		30	1,35	0
	35		3		35		6		35		2
	40		6		40	1,22	0		40		6
	45	1,10	0		45		4		45	1,36	0
	50		3		50		7		50		4
	55		6		55	1,23	0		55		8

Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
54°. 00'		1,37	2	57°. 00'		1,54	0	60°. 00'		1,73	3
	5		6		5		5		5		9
	10	1,38	0		10	1,55	0		10	1,74	5
	15		5		15		5		15	1,75	0
	20	1,39	0		20	1,56	0		20		6
	25		5		25		5		25	1,76	2
	30	1,40	0		30	1,57	0		30		8
	35		5		35		5		35	1,77	4
	40	1,41	0		40	1,58	0		40	1,78	0
	45		5		45		5		45		5
	50	1,42	0		50	1,59	0		50	1,79	2
	55		4		55		5		55		8
55 00			8	58 00		1,60	0	61 00		1,80	4
	5	1,43	2		5		5		5	1,81	0
	10		6		10	1,61	0		10		6
	15	1,44	1		15		5		15	1,82	2
	20		6		20	1,62	0		20		8
	25	1,45	1		25		6		25	1,83	4
	30		6		30	1,63	1		30	1,84	0
	35	1,46	0		35		6		35		6
	40		4		40	1,64	1		40	1,85	2
	45		8		45		7		45		9
	50	1,47	2		50	1,65	3		50	1,86	6
	55		6		55	1,66	0		55	1,87	3
56 00		1,48	2	59 00			5	62 00		1,88	0
	5		7		5	1,67	0		5		7
	10	1,49	2		10		6		10	1,89	4
	15		7		15	1,68	2		15	1,90	1
	20	1,50	2		20		8		20		8
	25		7		25	1,69	4		25	1,91	5
	30	1,51	2		30		9		30	1,92	2
	35		6		35	1,70	5		35		9
	40	1,52	0		40	1,71	0		40	1,93	6
	45		5		45		5		45	1,94	2
	50	1,53	0		50	1,72	1		50		9
	55		5		55		7		55	1,95	6

Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
3	63°.	00'	1,96	3	66°.	00'	2,25	4	69°.	00'	2,60	5
9		5	1,97	0		5	2,26	3		5	2,61	6
5		10		7		10	2,27	2		10	2,62	7
0		15	1,98	4		15	2,28	1		15	2,63	8
6		20	1,99	1		20	2,29	0		20	2,64	9
2		25		8		25		9		25	2,66	0
8		30	2,00	5		30	2,30	8		30	2,67	2
4		35	2,01	2		35	2,31	7		35	2,68	4
0		40		9		40	2,32	6		40	2,69	6
5		45	2,02	6		45	2,33	5		45	2,70	8
2		50	2,03	3		50	2,34	4		50	2,72	0
8		55	2,04	0		55	2,35	3		55	2,73	2
4	64	00		8	67	00	2,36	2	70	00	2,74	5
0		5	2,05	5		5	2,37	1		5	2,75	8
6		10	2,06	2		10	2,38	0		10	2,77	0
2		15	2,07	0		15		9		15	2,78	3
8		20		8		20	2,39	8		20	2,79	6
4		25	2,08	6		25	2,40	7		25	2,80	9
0		30	2,09	4		30	2,41	6		30	2,82	2
6		35	2,10	2		35	2,42	5		35	2,83	5
2		40	2,11	0		40	2,43	5		40	2,84	8
9		45		9		45	2,44	5		45	2,86	1
6		50	2,12	8		50	2,45	5		50	2,87	4
3		55	2,13	7		55	2,46	5		55	2,88	8
0	65	00	2,14	6	68	00	2,47	5	71	00	2,90	2
7		5	2,15	5		5	2,48	5		5	2,91	6
4		10	2,16	4		10	2,49	6		10	2,93	0
1		15	2,17	3		15	2,50	7		15	2,94	4
8		20	2,18	2		20	2,51	8		20	2,95	8
5		25	2,19	1		25	2,53	0		25	2,97	2
2		30	2,20	0		30	2,54	1		30	2,98	6
9		35		9		35	2,55	1		35	3,00	1
6		40	2,21	8		40	2,56	2		40	3,01	6
2		45	2,22	7		45	2,57	2		45	3,03	1
9		50	2,23	6		50	2,58	3		50	3,04	6
6		55	2,24	5		55	2,59	4		55	3,06	1

Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
72°.	00'	3,07	6	75°.	00'	3,73	0	76°.	48'	4,26	1
	5	3,09	3		3	3,74	3		51	4,27	8
	10	3,10	8		6	3,75	6		54	4,29	5
	15	3,12	3		9	3,77	0		57	4,31	3
	20	3,13	8		12	3,78	4	77	00	4,33	2
	25	3,15	4		15	3,79	8		3	4,35	0
	30	3,17	0		18	3,81	2		6	4,36	8
	35	3,18	6		21	3,82	6		9	4,38	6
	40	3,20	2		24	3,84	0		12	4,40	4
	45	3,41	8		27	3,85	4		15	4,42	2
	50	3,23	4		30	3,86	8		18	4,44	0
	55	3,25	0		33	3,88	2		21	4,43	8
73	00	3,26	7		36	3,89	6		24	4,47	6
	5	3,28	4		39	3,91	0		27	4,49	4
	10	3,30	1		42	3,92	4		30	4,51	2
	15	3,31	8		45	3,93	8		33	4,53	0
	20	3,33	6		48	3,95	2		36	4,54	8
	25	3,35	4		51	3,96	6		39	4,56	6
	30	3,37	2		54	3,98	0		42	4,58	4
	35	3,39	0		57	3,99	5		45	4,60	2
	40	3,40	9	76	00	4,01	0		48	4,62	0
	45	3,42	8		3	4,02	5		51	4,63	9
	50	3,44	7		6	4,04	0		54	4,65	8
	55	3,46	6		9	4,05	5		57	4,67	7
74	00	3,48	5		12	4,07	0	78	00	4,69	6
	5	3,50	4		15	4,08	5		3	4,71	5
	10	3,52	3		18	4,10	0		6	4,73	5
	15	3,54	2		21	4,11	5		9	4,75	5
	20	3,56	2		24	4,13	0		12	4,77	5
	25	3,58	2		27	4,14	6		15	4,79	6
	30	3,60	2		30	4,16	2		18	4,81	7
	35	3,62	3		33	4,17	8		21	4,83	8
	40	3,64	4		36	4,19	4		24	4,86	0
	45	3,66	5		39	4,21	0		27	4,88	3
	50	3,68	6		42	4,22	7		30	4,90	6
	55	3,70	8		45	4,24	4		33	4,93	2

Part of Links.

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Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
78°.	36'	4,95	3	80°.	24'	5,91	1	82°.	8'	7,24	0
	39	4,97	5		27	5,94	2		10	7,27	0
	42	5,00	0		30	5,97	3		12	7,30	0
	45	5,02	4		33	6,00	4		14	7,33	0
	48	5,04	8		36	6,03	6		16	7,36	5
	51	5,07	2		39	6,06	8		18	7,40	0
	54	5,09	6		42	6,10	1		20	7,43	5
	57	5,12	0		45	6,13	4		22	7,46	0
79	00	5,14	4		48	6,16	8		24	7,49	5
	3	5,16	8		51	6,20	2		26	7,53	0
	6	5,19	2		54	6,23	6		28	7,56	0
	9	5,21	6		57	6,27	0		30	7,59	5
	12	5,24	0	81	00	6,30	5		32	7,63	0
	15	5,26	5		3	6,34	1		34	7,66	5
	18	5,29	0		6	6,37	8		36	7,70	0
	21	5,31	5		9	6,41	6		38	7,73	5
	24	5,34	0		12	6,45	4		40	7,77	0
	27	5,36	5		15	6,49	2		42	7,80	5
	30	5,39	2		18	6,53	1		44	7,84	0
	33	5,41	8		21	6,56	5		46	7,87	5
	36	5,44	5		24	6,60	0		48	7,91	0
	39	5,47	2		27	6,65	0		50	7,94	5
	42	5,49	9		30	6,69	0		52	7,98	0
	45	5,52	6		33	6,73	0		54	8,02	0
	48	5,55	4		36	6,77	0		56	8,06	0
	51	5,58	2		39	6,81	1		58	8,10	0
	54	5,61	1		42	6,85	2	83	00	8,14	0
	57	5,64	0		45	6,89	3		2	8,18	0
80	00	5,67	0		48	6,93	5		4	8,22	0
	3	5,70	0		51	6,98	0		6	8,26	0
	6	5,73	0		54	7,02	5		8	8,30	0
	9	5,76	0		57	7,07	0		10	8,34	0
	12	5,79	0	82	00	7,11	5		12	8,38	0
	15	5,82	0		2	7,14	5		14	8,42	5
	18	5,85	0		4	7,17	5		16	8,47	0
	21	5,88	0		6	7,20	0		18	8,51	5

Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
83°.	20'	8,56	0	84°.	32'	10,45	0	85°.	22'	12,34	5
	22	8,60	5		34	10,51	5		23	12,39	0
	24	8,65	0		36	10,58	0		24	12,43	5
	26	8,69	5		38	10,64	5		25	12,48	0
	28	8,74	0		40	10,71	0		26	12,52	5
	30	8,78	5		42	10,78	0		27	12,57	0
	32	8,83	0		44	10,85	0		28	12,61	5
	34	8,87	5		46	10,93	0		29	12,66	0
	36	8,92	0		48	10,99	0		30	12,70	5
	38	8,96	5		50	11,06	0		31	12,75	0
	40	9,01	0		52	11,13	0		32	12,80	0
	42	9,06	0		54	11,20	5		33	12,85	0
	44	9,11	0		56	11,28	0		34	12,90	0
	46	9,16	0		58	11,35	5		35	12,95	0
	48	9,21	0	85	00	11,43	0		36	13,00	0
	50	9,26	0		1	11,47	0		37	13,05	0
	52	9,31	0		2	11,51	0		38	13,10	0
	54	9,36	0		3	11,55	0		39	13,15	0
	56	9,41	0		4	11,59	0		40	13,20	0
	58	9,46	0		5	11,62	0		41	13,25	0
84	00	9,51	0		6	11,66	0		42	13,30	0
	2	9,56	5		7	11,70	0		43	13,35	0
	4	9,62	0		8	11,74	0		44	13,40	0
	6	9,67	5		9	11,78	5		45	13,45	5
	8	9,73	0		10	11,83	0		46	13,51	0
	10	9,78	5		11	11,87	0		47	13,56	5
	12	9,84	0		12	11,91	0		48	13,62	0
	14	9,90	0		13	11,95	0		49	13,67	5
	16	9,96	0		14	11,99	0		50	13,73	0
	18	10,02	0		15	12,03	0		51	13,78	5
	20	10,08	0		16	12,07	5		52	13,84	0
	22	10,14	0		17	12,12	0		53	13,89	5
	24	10,20	0		18	12,16	5		54	13,95	0
	26	10,26	0		19	12,21	0		55	14,00	5
	28	10,32	0		20	12,25	5		56	14,06	0
	30	10,38	5		21	12,30	0		57	14,12	0

Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Part of Links.
85°.	58'	14,18	0	86°.	34'	16,67	0	87°.	10'	20,20	0
	59	14,24	0		35	16,75	0		11	20,32	5
86	00	14,30	0		36	16,83	0		12	20,45	0
	1	14,36	0		37	16,91	5		13	20,57	5
	2	14,42	0		38	17,00	0		14	20,70	0
	3	14,48	0		39	17,08	5		15	20,82	5
	4	14,54	0		40	17,17	0		16	20,95	0
	5	14,60	5		41	17,25	5		17	21,08	0
	6	14,67	0		42	17,34	0		18	21,21	0
	7	14,73	5		43	17,43	0		19	21,34	0
	8	14,80	0		44	17,52	0		20	21,47	0
	9	14,86	5		45	17,61	0		21	21,60	5
10		14,93	0		46	17,70	0		22	21,74	0
11		14,99	5		47	17,79	0		23	21,88	0
12		15,06	0		48	17,88	5		24	22,02	0
13		15,12	5		49	17,98	0		25	22,16	0
14		15,19	0		50	18,08	5		26	22,30	0
15		15,25	5		51	18,17	0		27	22,45	0
16		15,32	0		52	18,27	0		28	22,60	0
17		15,39	0		53	18,37	0		29	22,75	0
18		15,46	0		54	18,47	0		30	22,90	0
19		15,53	0		55	18,57	0		31	23,05	5
20		15,60	0		56	18,67	0		32	23,21	0
21		15,67	5		57	18,77	0		33	23,37	0
22		15,75	0		58	18,87	0		34	23,53	0
23		15,82	5		59	18,97	5		35	23,69	0
24		15,90	0	87	00	19,08	0		36	23,85	5
25		15,97	5		1	19,18	5		37	24,02	0
26		16,05	0		2	19,29	0		38	24,19	0
27		16,12	5		3	19,40	0		39	24,36	5
28		16,20	0		4	19,51	0		40	24,54	0
29		16,27	5		5	19,62	0		41	24,72	0
30		16,35	0		6	19,73	0		42	24,90	0
31		16,43	0		7	19,84	0		43	25,08	0
32		16,51	0		8	19,96	0		44	25,26	0
33		16,59	0		9	20,08	0		45	25,44	5

Degrees.	Minutes.	Chains and Links.	Part of Links.	Degrees.	Minutes.	Chains and Links.	Degrees.	Minutes.	Chains and Links.	Degrees.	Minutes.	Chains and Links.	Degrees.	Minutes.	Chains.
87°. 46'		25,63	0	88°. 20'		34,37	88°. 54'		52,08	89°. 28'		107			
47		25,82	5	21		34,72	55		52,90	29		111			
48		26,03	0	22		35,07	56		53,70	30		115			
49		26,23	0	23		35,43	57		54,60	31		119			
50		26,43	0	24		35,80	58		55,50	32		123			
51		26,63	0	25		36,18	59		56,40	33		127			
52		26,84	0	26		36,56	89 00		57,30	34		132			
53		27,05	0	27		36,95	1		58,25	35		137			
54		27,27	0	28		37,35	2		59,30	36		143			
55		27,49	0	29		37,77	3		60,35	37		149			
56		27,71	0	30		38,19	4		61,40	38		156			
57		27,93	0	31		38,61	5		62,50	39		164			
58		28,16	5	32		39,05	6		63,60	40		172			
59		28,40	0	33		39,50	7		64,80	41		181			
88 00		28,64	0	34		40,00	8		66,00	42		190			
1		28,87	0	35		40,50	9		67,30	43		202			
2		29,12	0	36		41,00	10		68,60	44		215			
3		29,37	0	37		41,50	11		70,00	45		229			
4		29,62	0	38		42,00	12		71,50	46		246			
5		29,88	0	39		42,50	13		73,10	47		265			
6		30,15	0	40		43,00	14		74,70	48		287			
7		30,41	0	41		43,50	15		76,40	49		312			
8		30,68	0	42		44,00	16		78,20	50		344			
9		30,96	0	43		44,64	17		80,00	51		382			
10		31,24	0	44		45,22	18		81,80	52		430			
11		31,53	0	45		45,83	19		83,90	53		491			
12		31,82	0	46		46,45	20		86,00	54		573			
13		32,12	0	47		47,08	21		88,30	55		688			
14		32,42	0	48		47,74	22		90,60	56		860			
15		32,73	0	49		48,41	23		93,00	57		1114			
16		33,05	0	50		49,11	24		95,50	58		1170			
17		33,37	0	51		49,70	25		98,20	59		1344			
18		33,69	0	52		50,50	26		100,50						
19		34,03	0	53		51,30	27		103,50						

Chains.

0	107
1	111
2	115
3	119
4	123
5	127
6	132
7	137
8	143
9	149
0	156
1	164
2	172
3	181
4	190
5	202
6	215
7	229
8	246
9	265
0	287
1	312
2	344
3	382
4	430
5	491
6	573
7	688
8	860
9	1114
0	1170
1	1344